UNITED STATES PATENT AND TRADEMARK OFFICE

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10/658,631	09/08/2003	Naoyuki Sato	SONY-26700	3451

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Jonathan O. Owens	
HAVERSTOCK & OWENS LLP	HOANG, HIEU T
162 North Wolfe Road	
Sunnyvale, CA 94086	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 September 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the amendment filed on 09/08/2003.

2.   Claims 1-25 are pending and presented for examination.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 15-18 and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ong

et al. (US 2003/0182450, hereafter Ong).

5.   For claim 15, Ong discloses a method of providing an interface to one or more

synchronization applications resident within a first device coupled to a network of devices

(abstract), the method comprising:

- sending and receiving messages to and from the one or more synchronization applications

    through an interface layer to one or more synchronization protocol stacks, to synchronize

    data between the first device and at least one other device within the network of devices

    ([0139], API interface between applications and plug-in modules for synchronization

    tasks, [0143] lines 1-5, synchronization protocols, lines 5-9, a user client synchronizes

with a server (or some other devices) using an email protocol), wherein the messages

between the one or more synchronization applications and the interface layer are

independent of a protocol used between the interface layer and the synchronization

protocol stacks (Ong, [0139], an application programming interface API is not a protocol

and is independent of synchronizing protocols such as SyncML and WebDAV); and

- generating and receiving communications at the interface layer to complete data

  synchronization between the first device and the at least one other device within the

  network of device (Ong, [0139], API for document conversion, differencing, and merging

  of documents created or edited on more sophisticated devices for synchronizing

  documents of applications between devices, [0143], supporting a variety of

  synchronization protocols such as SyncML, WebDAV).

6.   For claim 21, Ong discloses an apparatus for providing an interface to one or more

synchronization applications resident within a first device coupled to a network of devices

(abstract), the apparatus comprising:

- means for sending and receiving messages to and from the one or more synchronization

  applications through an interface layer to one or more synchronization protocol stacks, to

  synchronize data between the first device and at least one other device within the network

  of devices ([0139], API interface between applications and plug-in modules for

  synchronization tasks, [0143] lines 1-5, synchronization protocols, lines 5-9, a user client

  synchronizes with a server (or some other devices) using an email protocol), wherein the

  messages between the one or more synchronization applications and the interface layer

are independent of a protocol used between the interface layer and the synchronization

protocol stacks (Ong, [0139], an application programming interface API is not a protocol

and is independent of synchronizing protocols such as SyncML and WebDAV); and

- means for generating and receiving communications at the interface layer to complete

data synchronization between the first device and the at least one other device within the

network of device (Ong, [0139], API for document conversion, differencing, and merging

of documents created or edited on more sophisticated devices for synchronizing

documents of applications between devices, [0143], supporting a variety of

synchronization protocols such as SyncML, WebDAV).

7.   For claims 16 and 22, Ong further discloses the synchronization application is selected

from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and

contents upload ([0005] lines 9-18, PIM, [0037], [0038], downloading and uploading

synchronizations are possible).

8.   For claims 17 and 23, Ong further discloses the interface layer is an application

programming interface (API) (Ong, [0139]).

9.   For claims 18 and 24, Ong further discloses the interface layer is protocol independent

(Ong, [0139], an application programming interface API is not a protocol).

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

11.   Claims 1-5, 6-13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ong in view of Ericsson et al. (SyncML Sync Protocol, version 1.0.1,

http://www.openmobilealliance.org/tech/affiliates/syncml/syncml_protocol_v101_

20010615.pdf, hereafter Ericsson)

12.   For claim 1, Ong discloses a first device to synchronize data with a second device (fig.

1B, server and small device synchronizing), the first device (server) comprising:

- one or more applications (fig. 2, server 102 contains office applications, [0028]-[0030],

  sound, video, and word processing applications);

- a network layer coupled to interface with the second device ([0031] lines 12-16, network

  layer between the server and the small device, [0038] lines 19-21, HTTP or XML

  network layer);

- synchronization protocols to provide a synchronization protocol between the first device

  and the second device ([0143] lines 1-5, synchronization protocols, lines 5-9, a user client

  synchronizes with a server (or some other devices) using an email protocol); and

- an interface layer coupled to communicate with the one or more applications and the

  synchronization layer to provide generic synchronization communications between the

  one or more applications and the synchronization layer ([0139], an application

  programming interface API to communicate with the documents (or applications) and the

  synchronization plug-in modules (synchronization layer, [0143] lines 1-5, SyncML and

  WebDAV synchronization protocols).

Ong does not explicitly disclose a synchronization layer coupled to the network layer and

the synchronization layer consists of synchronization protocol(s).

However, Ericsson discloses a synchronization layer coupled to the network layer and the

synchronization layer consists of synchronization protocol(s) (section 1.1, fig. 1, SyncML I/F is

the interface layer, SyncML adapter is the synchronization layer, coupled to HTTP/WSP/OBEX

or the network layer).

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in

order to develop a synchronization method supporting a plurality of synchronization protocols as

one described by Ong.

13.   For claim 8, Ong discloses a network comprising one or more network devices (fig. 2, a

server, a workstation, a small device); and an application device comprising:

- one or more applications (fig. 2, server 102 contains office applications, [0028]-[0030],

  sound, video, and word processing applications);

- a network layer coupled to interface with the one or more network devices ([0031] lines

  12-16, network layer between the server and the small device, [0038] lines 19-21, HTTP

  or XML network layer);

- synchronization protocols to provide a synchronization protocol between the application

  device and the one or more network devices ([0143] lines 1-5, synchronization protocols,

  lines 5-9, a user client synchronizes with a server (or some other devices) using an email

  protocol); and

- an interface layer coupled to communicate with the one or more applications and the

  synchronization layer to provide generic synchronization communications between the

  one or more applications and the synchronization layer ([0139], an application

  programming interface API to communicate with the documents (or applications) and the

  synchronization plug-in modules (synchronization layer, [0143] lines 1-5, SyncML and

  WebDAV synchronization protocols).

Ong does not explicitly disclose a synchronization layer coupled to the network layer and

the synchronization layer consists of synchronization protocol(s).

However, Ericsson discloses a synchronization layer coupled to the network layer and the

synchronization layer consists of synchronization protocol(s) (section 1.1, fig. 1, SyncML I/F is

the interface layer, SyncML adapter is the synchronization layer, coupled to HTTP/WSP/OBEX

or the network layer).

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in

order to develop a synchronization method supporting a plurality of synchronization protocols as one described by Ong.

14.   For claims 2 and 9, Ong-Ericsson substantially discloses the invention as in claims 1 and 8, Ong-Ericsson further discloses at least one of the one or more applications comprises a synchronization application (Ong, [0046] lines 7-10).

15.   For claims 3 and 10, Ong-Ericsson substantially discloses the invention as in claims 2 and 9. Ong-Ericsson further discloses the synchronization application is selected from a group consisting of Personal Information Manager (PIM) sync, contents distribution, and contents upload (Ong, [0005] lines 9-18, PIM, [0037], [0038], downloading and uploading synchronizations are possible).

16.   For claims 4 and 11, Ong-Ericsson substantially discloses the invention as in claims 1, 8. Ong-Ericsson further discloses the interface layer is an application programming interface (API) (Ong, [0139]).

17.   For claims 5, 12, Ong-Ericsson substantially discloses the invention as in claims 1, 8. Ong-Ericsson further discloses the interface layer is protocol independent (Ong, [0139], an application programming interface API is not a protocol).

18.   For claims 6 and 13, Ong-Ericsson substantially discloses the invention as in claims 1

and 8. Ong-Ericsson further discloses synchronization layer comprises a synchronization

protocol stack (same rationale as in claim 1, synchronization layer contains a synchronization

protocol stack such as SyncML and WebDAV, etc.).

19.   For claim 20, Ong substantially discloses the invention as in claim 15. Ong further

discloses the synchronization protocol stacks ([0143]). Ong does not explicitly disclose the

communications generated at the interface layer are sent to a network layer via one

synchronization protocol within the first device, and communications received at the interface

layer are received from one synchronization protocol stacks via the network layer.

     However, Ericsson discloses the communications generated at the interface layer are sent

to a network layer via one synchronization protocol within the first device, and communications

received at the interface layer are received from one synchronization protocol stacks via the

network layer (Ericsson, fig. 1, at the sending side, data goes from the interface layer (SyncML

I/F) to synchronization layer (SyncML adapter) to the network layer, and vice versa at the

receiving side).

     Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Ong and Ericsson to apply the framework of Ericsson in

order to develop a synchronization method supporting a plurality of synchronization protocols as

one described by Ong.

20.   Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong, as

applied to claims 15, and 21, in view of Stevenson et al. (US 2003/0014483, hereafter

Stevenson)

21.   For claims 19 and 25, Ong-Ericsson substantially discloses the invention as in claims 15,

21. Ong-Ericsson further discloses the synchronization protocol stack is selected from a group

consisting of SyncML and Web Distributed Authoring and Versioning (WebDAV) (Ong,

[0143]).

Ong-Ericsson discloses other protocols for synchronization such as SOAP and epXML

(Ong, [0143]). Ong-Ericsson does not disclose Information Content Exchange (ICE).

However, Stevenson discloses Information Content Exchange (ICE, [0107])

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Ong and Stevenson to implement a synchronization

protocol stack consisting of SyncML, WebDAV, and ICE to provide more flexibility and

functionality to the system.

22.   Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong-

Ericsson, as applied to claims 5, 13, in view of Stevenson.

23.   For claims 7 and 14, Ong-Ericsson substantially discloses the invention as in claims 5,

13. Ong-Ericsson further discloses the synchronization protocol stack is selected from a group

consisting of SyncML and Web Distributed Authoring and Versioning (WebDAV) (Ong,

[0143]).

Ong-Ericsson discloses other protocols for synchronization such as SOAP and epXML

(Ong, [0143]). Ong-Ericsson does not disclose Information Content Exchange (ICE).

However, Stevenson discloses Information Content Exchange (ICE, [0107])

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Ong and Stevenson to implement a synchronization

protocol stack consisting of SyncML, WebDAV, and ICE to provide more flexibility and

functionality to the system.

Conclusion

24.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure:

- Hansmann et al. US 2005/0228812. Accessing different types of back ended data stores.

- Leung. US 6,487,605. Mobile IP mobility agent.

- Naidoo et al. US 6,594,228. Backup for signaling links.

- Flanagin et al. US 7,149,813. Synchronizing mobile devices.
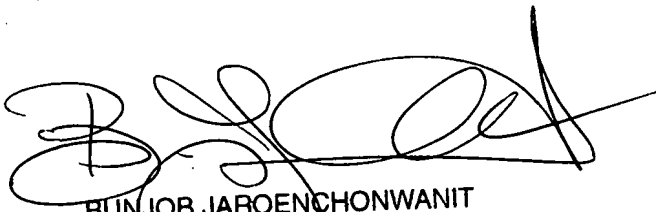

25.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The

examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER